

# The Poultry Industry

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- Total poultry >85# (65# chicken, 20# turkey)
- Why?
  - Health
  - Price
  - Convenience
- King of user friendly, further processed, convenience items

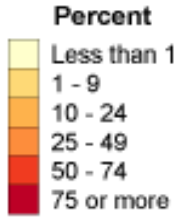
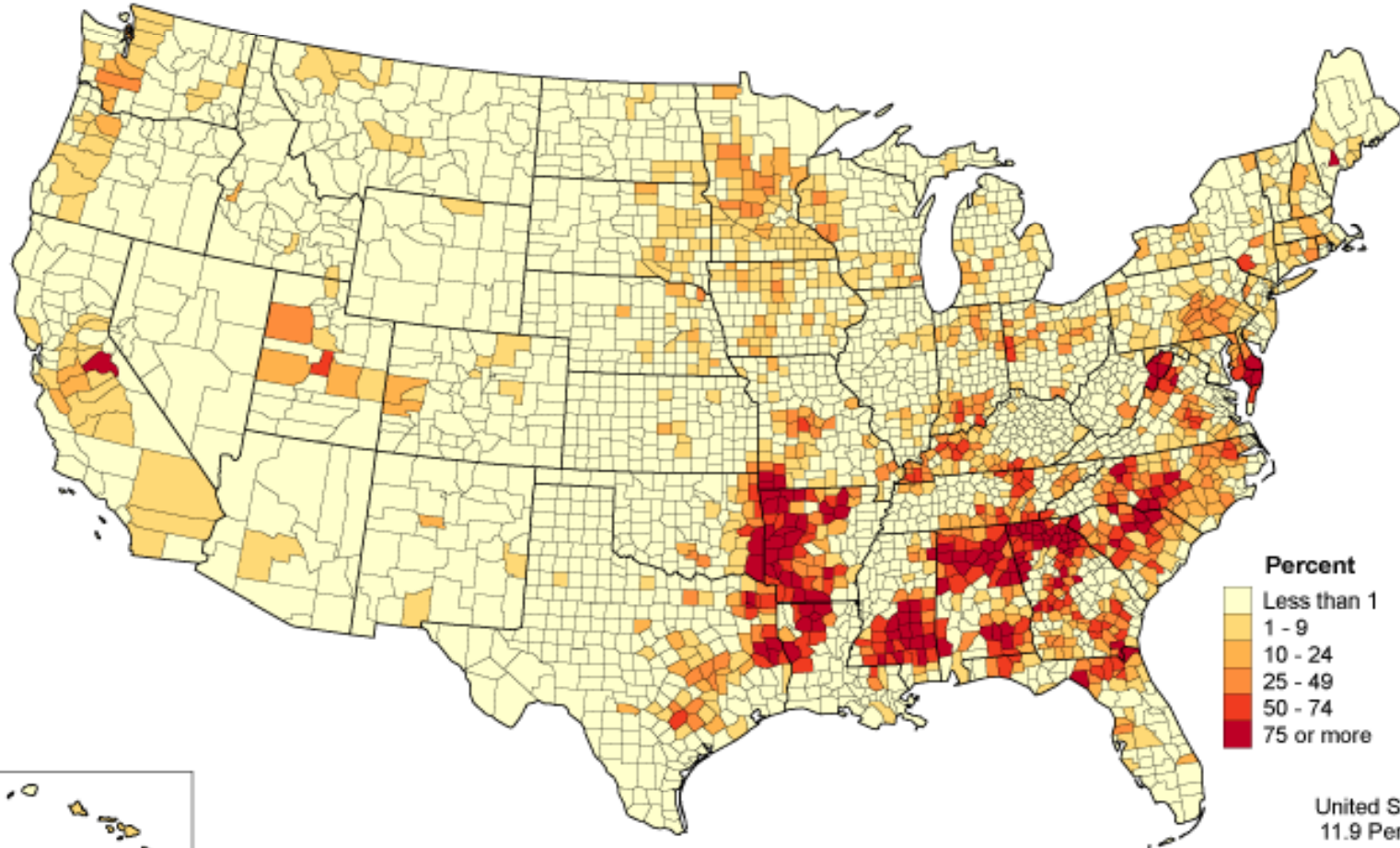


# The Poultry Industry

- **Totally vertically integrated**
- **Use one and only one breed of chicken and turkey**
- **Don Tyson revolutionized the poultry industry**
- **One of the largest meat processor after purchasing IBP**



**Value of Poultry and Eggs  
as Percent of Total Market Value  
of Agricultural Products Sold: 2002**



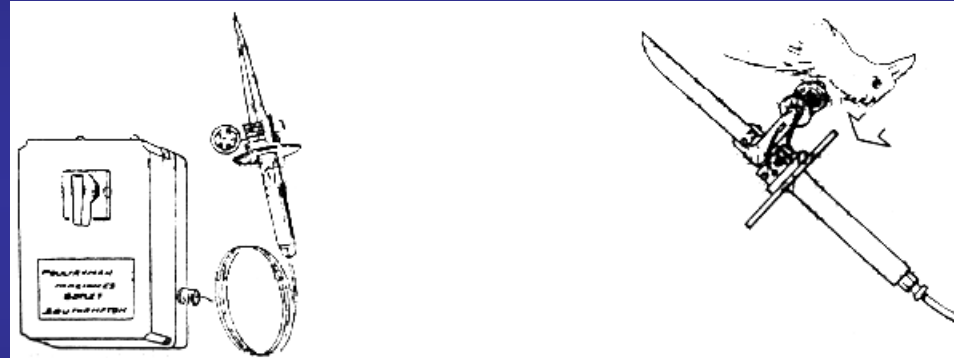
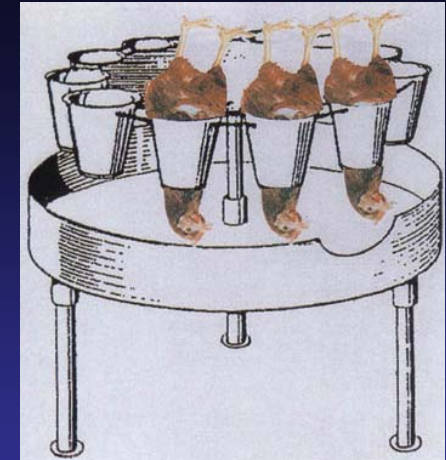
United States  
11.9 Percent



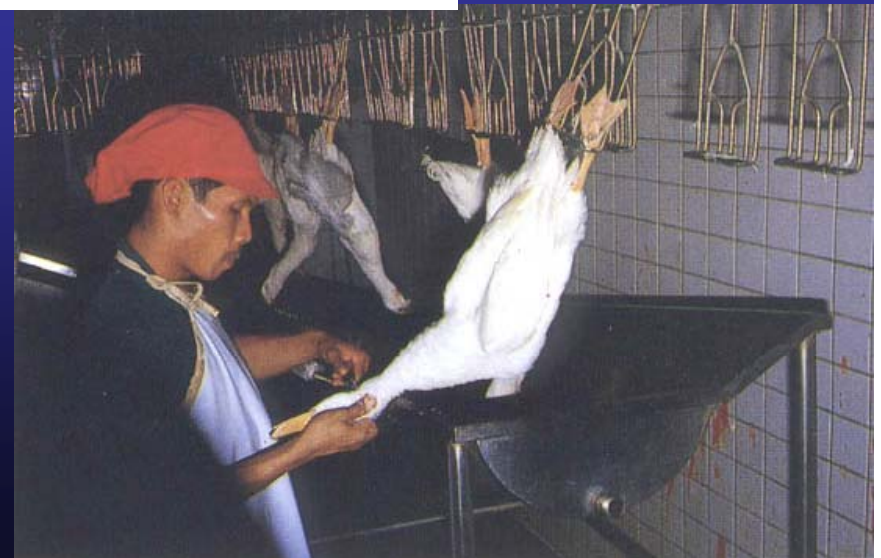




## Shackling and Restraining



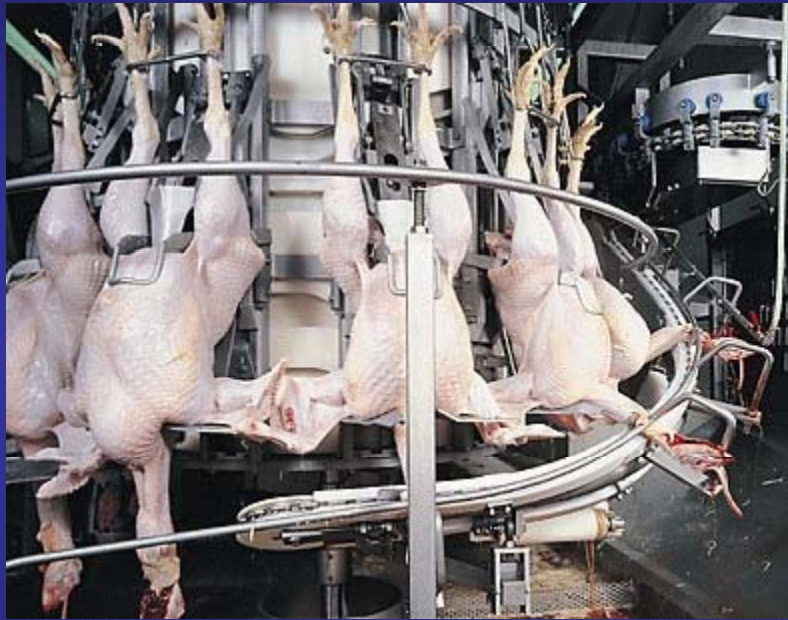
Stunning; electric water bath, or electric knife





**Defeathering; hot water, and feather pluckers**





**Evisceration; vacuum intestinal pack**

**Carcasses are chill in ice water or air chilled (rare)**

# **Further Processed, User-friendly, Convenience Items**

- **Revolutionized the industry by introducing and marketing further processed poultry items**
- **User friendly, microwavable or ready-to-eat items, convenience items**
- **Turkey is no longer a seasonal item**
- **Due to further processing, the rest of the industry is quickly following in poultries footsteps**





ew Oven Roasted products, which received g ratings from consumers in pre-market g, contain no preservatives and come in a e vacuum sealed package.





**Wing Zone**

**HOOTERS**<sup>®</sup>  
*Casino Hotel ♦ Las Vegas*

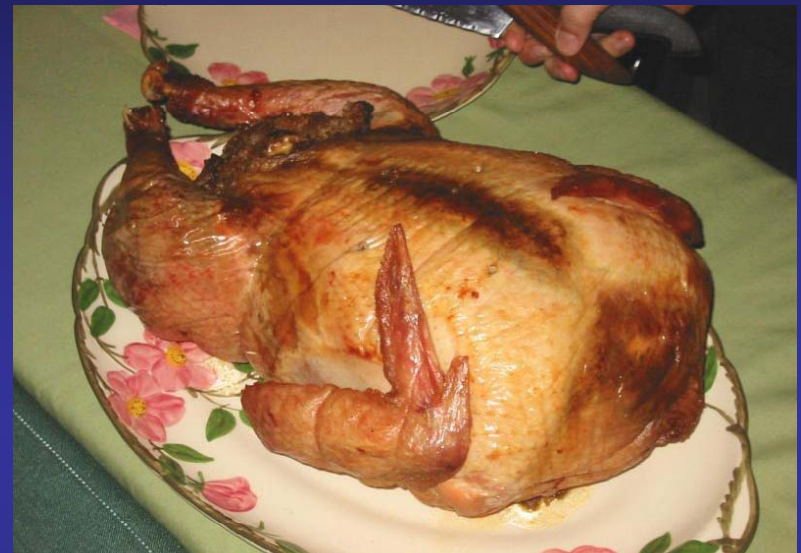


**BUFFALO WILD WINGS**  
GRILL & BAR



# What is a Turducken??

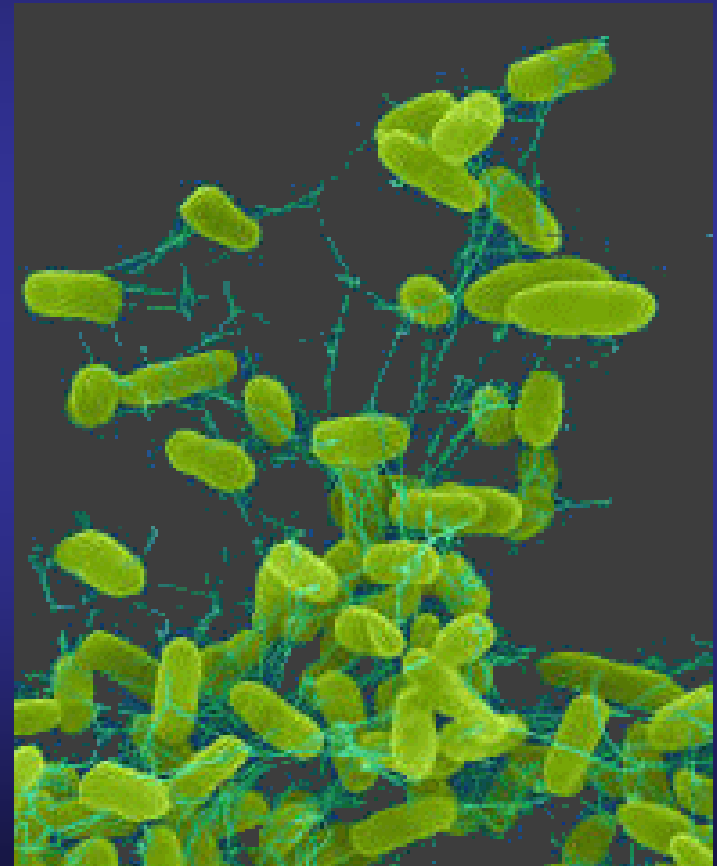
- A Cajun Tradition; Eastern Texas and Louisiana
- A boneless turkey stuffed with a boneless duck, stuffed with a boneless chicken
- Gaps filled in with bread crumbs and sometime sausage





# Concerns with the Poultry Industry

- **Salmonella**
  - Naturally occurring
  - Dies at 158° F
- **Fear leads to over cooking**
- **Therefore, most poultry is “enhanced with a solution of sodium phosphate”**



# Common Questions

- How do I defrost a turkey?
- Refrigerator – 24h for every 5 lbs
- Cold water – 2h for every pound
- How do I cook a turkey?



# Cooking a Turkey

## Wt (pounds) Time (hours)

8-12                      2 <sup>3</sup>/<sub>4</sub> - 3 h

12-14                     3 - 3 <sup>3</sup>/<sub>4</sub> h

14-18                    3 <sup>3</sup>/<sub>4</sub> - 4 <sup>1</sup>/<sub>4</sub> h

18-20                    4 <sup>1</sup>/<sub>4</sub> - 4 <sup>1</sup>/<sub>2</sub> h

20<                      4 <sup>1</sup>/<sub>2</sub> + h

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325° F; Safe to eat at 165° F over  
cooked above 180° F; add 1 hour for  
stuffing

## Frying Turkey

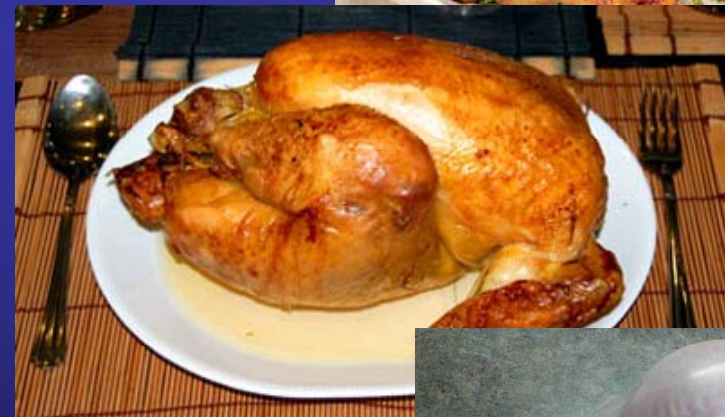
- Peanut Oil
- 350° F oil temperature
- Turkey needs to be totally covered, by at least 2" of oil
- 3 minutes per pound

**Still need to monitor internal breast temperature**



# Other Poultry Stuff

- **Cornish Hen – Rock Cornish or Cornish Game Hen, small (<2 lbs) less than 5 weeks old**
- **Capon – Surgically neutered male chicken (12 wks or older)**
- **Broiler/ Fryer – everyday chicken; either sex (10wks or less)**
- **Sewing Chicken or Hen – female chicken, old, not very tender**



# Poultry Quality Problems

- **Can happen in Chickens**
- **Turkeys – Focal myopathy, Turkey muscle myopathy, or Green Muscle Disease**
  - Un-noticeable until the breast is cooked and/ or processed
  - Doesn't slice, but crumbles
  - Bred to have large breasts, excessive wing flapping will cut off the blood flow to certain parts of the breast
  - Larger, wider muscle fibers
  - Thus, muscle death



Cornell University





**Questions?**